



**PECO  
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A Unit of PECO Energy

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October 15, 2000

Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Docket No. 50-277  
SUBJECT: Licensee Event Report, Peach Bottom Atomic Power Station Unit 2

This LER reports the initiation of a manual Reactor Protection System (RPS) actuation as a result of a conservative decision made by the operators after an unplanned trip of the 2B Reactor Recirculation pump. The LER is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(iv).

Reference: Docket No. 50 277  
Report Number: 2-00-003  
Revision Number: 00  
Event Date: 09/15/00  
Report Date: 10/15/00

Facility: Peach Bottom Atomic Power Station Unit 2  
1848 Lay Road, Delta, PA 17314-8032

Sincerely,



Gordon L. Johnston, Plant Manager

GLJ/scb

enclosure

cc: PSE&G, Financial Controls and Co-owner Affairs  
R. R. Janati, Commonwealth of Pennsylvania  
INPO Records Center  
H. J. Miller, US NRC, Administrator, Region I  
R. I. McLean, State of Maryland  
A. C. McMurtry, US NRC, Senior Resident Inspector  
A. F. Kirby III, DelMarVa Power

CCN 00-14081

IE22

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to the industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor and a person is not required to respond to, the information collection.

## LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

**FACILITY NAME (1)**

Peach Bottom Atomic Power Station Unit 2

**DOCKET NUMBER (2)**

0500 277

**PAGE (3)**

1 of 3

**TITLE (4)**

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(iv) for unplanned manual Reactor Protection System (RPS) scram.

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	Sequential Number	Revision Number	MONTH	DAY	YEAR	Facility Name	Docket Number
09	15	2000	2000	003	00	10	15	2000	Facility Name	Docket Number
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more) (11)							
POWER LEVEL (10)		16	20.2201(B)			20.2203(a)(2)(v)			50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)			20.2203(a)(3)(i)			50.73(a)(2)(ii)	50.73(a)(2)(x)
			20.2203(a)(2)(i)			20.2203(a)(3)(ii)			50.73(a)(2)(iii)	73.71
			20.2203(a)(2)(ii)			20.2203(a)(4)	X		50.73(a)(2)(iv)	OTHER
			20.2203(a)(2)(iii)			50.36(c)(1)			50.73(a)(2)(v)	Specify in Abstract below
			20.2203(a)(2)(iv)			50.36(c)(2)			50.73(a)(2)(vii)	or in NRC Form 336A

**LICENSEE CONTACT FOR THIS LER (12)**

**NAME**

Andrew Winter

**TELEPHONE NUMBER (include area code)**

717.456.3598

**COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)**

Cause	System	Component	Manufacturer	Reportable to EPIX	Cause	System	Component	Manufacturer	Reportable to EPIX
A									
Personnel Error									

**SUPPLEMENTAL REPORT EXPECTED (14)**

YES (If yes, complete EXPECTED SUBMISSION DATE) X NO

**EXPECTED**

Submission Date (15)

Month

Day

Year

**ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)**

On September 15, 2000 at 1505 hours, with Unit 2 operating at approximately 16% power in preparation for the 13<sup>th</sup> refueling outage, an unplanned manual reactor scram was inserted. The unplanned manual reactor scram was inserted as a result of the unplanned trip of the 2B Reactor Recirculation pump due to improper tag-out coordination in conjunction with the planned trip of the main turbine. As expected, Primary Containment Isolation System (PCIS) Group 2 and Group 3 isolations, and Secondary Containment Isolation also initiated. RPS, PCIS, and Secondary Containment are Engineered Safety Features (ESF).

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(iv) for the unplanned manual scram as a result of the 2B Reactor Recirculation pump trip.

**LICENSEE EVENT REPORT (LER)**  
**TEXT CONTINUATION**

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		2000	003	00	

**TEXT** (If more space is required, use additional copies of NRC form 336A) (17)

**Requirements of the Report**

The LER is being submitted pursuant to the requirements of 10 CFR 50.73 (a)(2)(iv) due to the unplanned actuation of the following Engineered Safety Features (ESF)(EIS: JE): the Reactor Protection System (RPS), the Primary Containment Isolation System (PCIS), and the Secondary Containment Isolation System (which includes Standby Gas Treatment (SGT) initiation).

**Unit Conditions at Time of Event**

Unit 2 was in Mode 1 (RUN) at approximately 16 percent power (EIS: EA) prior to the occurrence of the event. No other systems, structures, or components were inoperable which contributed to this event.

**Description of the Event**

On September 15, 2000 at 1503 hours, the main turbine was being removed from service per plant procedures in preparation for the start of the Unit 2 13<sup>th</sup> refueling outage. Immediately after the turbine was removed from service an unplanned trip of the 2B Recirculation pump occurred due to inadequate tag-out coordination. At 1505 hours, plant operators made a conservative decision, based on their understanding of plant conditions, to manually scram the Unit 2 reactor (RPS)(EIS:JC). The operator's decision to insert a manual scram was based on their understanding that the plant had entered the restricted area of the Peach Bottom power to flow map, which required a plant scram, after the unplanned trip of the 2B Reactor Recirculation pump. Following the manual reactor scram, an expected decrease in reactor water level resulted in an automatic Primary Containment Group 2 and Group 3 (PCIS) (EIS: JM) and Secondary Containment isolation. All control rods (EIS: AA) fully inserted on the scram signal, bringing the reactor subcritical, and all safety systems responded as designed.

At the time the plant operators made the decision to insert the manual scram, the plant conditions were approximately 16 percent power and 24 percent core flow. Although this condition is close to an operational limit conservatively established by the licensee, plant conditions did not require a manual scram. Furthermore, plant conditions were not changing in a direction that would have required the manual scram or any other ESF actuations to mitigate the consequences of this event.

**LICENSEE EVENT REPORT (LER)**  
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**Cause of the Event**

The cause of the event was improper tag-out coordination that resulted in the unplanned trip of the 2B Reactor Recirculation pump and subsequent conservative manual operator action.

**Analysis of the Event**

There were no safety consequences due to this event. During and following the transient, all safety systems performed as designed. The unplanned trip of the 2B Reactor Recirculation pump did not place the plant in any unanalyzed conditions and conservative actions were taken by the plant operator to place the plant in a shutdown condition.

**Corrective Actions**

The improper tag-out coordination was reviewed and corrected. Outage related tag-outs were evaluated to determine if other interaction problems existed. No other deficiencies were found.

**Previous Events**

No previous events could be identified where a conservative manual scram was performed in response to a trip of a Reactor Recirculation pump.